SMPTE 162-1998
Revision of
ANSI/SMPTE 162-1992

SMPTE STANDARD

for Motion-Picture Film (8-mm Type S) — 16-mm Film Perforated 8-mm Type S, (1-4) — Magnetic Striping

1 Scope

This standard specifies the location and dimensions of the magnetic recording stripes and the balance stripes applied to 16-mm motion-picture film with two rows of 8-mm type S perforations in positions 1 and 4.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent edition of the standards indicated below.

ANSI/SMPTE 168-1996, Motion-Picture Film (16-mm) — Perforated 8-mm Type S, (1-4)

SMPTE 161-1998, Motion-Picture Film (8-mm Type S) — Magnetic Striping

3 Dimensions

3.1 The location and dimensions of the magnetic recording stripes and balance stripes shall be as given in figure 1 and table 1.

3.2 The magnetic striping material shall be applied to the surface of the film away from a camera or projector lens, for example, toward the light source of a projector arranged for direct front projection on a reflection-type screen.

3.3 The stripes designated as “recording” are made of a magnetic material and are intended for the audio record. The stripes between the edge of the film and the perforations are the balance stripes. The balance stripes may be stripes of magnetic or nonmagnetic material of such thickness that the balance and recording stripes project above the surface of the film to substantially the same degree.

4 Film stock

The film stock used shall be safety type, cut and perforated in accordance with ANSI/SMPTE 168.

NOTES

1 The width and edge-to-perforation distance of the 8-mm slit strip shall be in accordance with ANSI/SMPTE 168. The location of the magnetic recording and balance stripes shall be in accordance with SMPTE 161. Consequently, it is not possible to take full advantage of the tolerance of both the slit width and the location of the magnetic recording and balance stripes.

2 Tolerances for the recording stripes are specified to permit usage of a single wide stripe or two separate stripes. If two stripes are used, the amount of separation between the stripes should be sufficient to permit slitting within the requisites of the standard without obtaining undesirable feather edges of magnetic material. The separation required is determined by laboratory practice.

3 Notwithstanding the tolerance on dimensions M, N, P, and Q, the width of the stripes, dimension N minus M and Q minus P, shall be 0.0250 in (0.635 mm) minimum.

Approved
September 1, 1998

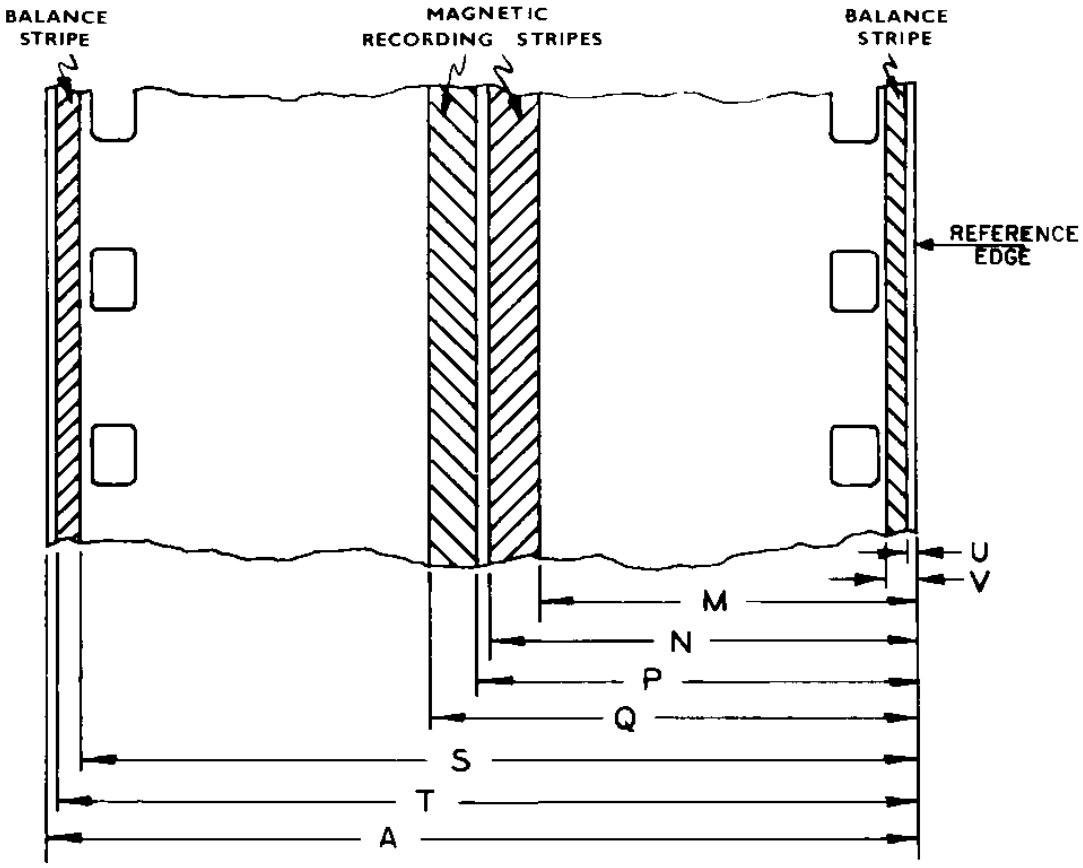

Figure 1 – Dimensions

Table 1 – Specifications

Dimensions	Inches	Millimeters
A	0.628 nom	15.95 nom
M[1)]	0.285 ± 0.002	7.24 ± 0.05
N[1)]	0.312 ± 0.002	7.92 ± 0.05
P[1), 2)]	0.316 ± 0.002	8.02 ± 0.05
Q[1)]	0.343 ± 0.002	8.71 ± 0.05
S	0.613 ± 0.003	15.57 ± 0.08
T	0.625 ± 0.003	15.88 ± 0.08
U	0.003 ± 0.003	0.08 ± 0.08
V	0.015 ± 0.003	0.38 ± 0.08

[1)] See note 3.
[2)] The millimeter conversion is approximate so that dimension P minimum equals dimension N maximum.